Name of the work: Balance Work of Marriage Community Hall in Jakkur in Ward No. 07, (Byatarayanapura).

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Contractor/Agency : Sri K. Shankar Reddy
Name of the Client : BBMP

Estimated Cost : 200.00Lakhs

Status of Bill : 1st and Final Bill

In the Presence of : (a)Mr Srinivasalu
Assistant Engineer, BBMP, Bangalore.
: (b)Mr Sundresh G K
Assistant Executive Engineer, BBMP, Bangalore
: (c) Mr. Tejashwagowda Site Engineer
M/s Tejus Consultants

Sl. No.	Description	Comments/observation
1	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.	Work done up to the billed quantity and quality is satisfactory
2	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, qÀell compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) **Mix 1:4:8(M5) Using 40 mm nominal size graded crushed coarse aggregates**	Work done up to the billed quantity and quality is satisfactory
3	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)	Work done up to the billed quantity and quality is satisfactory

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4	Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification.	Work done up to the billed quantity and quality is satisfactory
5	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite / trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately)	Work done up to the billed quantity and quality is satisfactory
6	**First Floor**	Work done up to the billed quantity and quality is satisfactory
7	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.	Work done up to the billed quantity and quality is satisfactory
8	**First Floor**	Work done up to the billed quantity and quality is satisfactory
9	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications	Work done up to the billed quantity and quality is satisfactory
	Qty Above 125%	Work done up to the billed quantity and quality is satisfactory
10	**First Floor**	Work done up to the billed quantity and quality is satisfactory
	Qty Above 125%	Work done up to the billed quantity and quality is satisfactory
11	Providing 12 mm cement plaster with cement mortar 1:4 (1 cement: 4 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge	Work done up to the billed quantity and quality is satisfactory
12	**First Floor**	Work done up to the billed quantity and quality is satisfactory

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13	Finishing walls with water proofing cement paint of required shade :New work (Two coats applied @ 4.84 kg/10 m²) to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Work done up to the billed quantity and quality is satisfactory
14	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :Two coats on new work after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge	Work done up to the billed quantity and quality is satisfactory
15	Finishing walls with textured exterior paint of required shade :New work (Two coats applied @ 3.28 ltr/10 m²) over and including priming coat of exterior primer applied @ 2.20kg/10 m² to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge	Work done up to the billed quantity and quality is satisfactory
16	roviding and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. ** **Polished Granite stone slab Black, Cherry Red, Brown, Cat Eye, River Pink or equivalent**.	Work done up to the billed quantity and quality is satisfactory
17	Providing Teak wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications.	Work done up to the billed quantity and quality is satisfactory
18	Providing and fixing in position fully panelled Teak wood shutters for doors with , stiles and rails of 35mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures)	Work done up to the billed quantity and quality is satisfactory
19	Providing Honne wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications.	Work done up to the billed quantity and quality is satisfactory

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20	Providing and fixing in position fully panelled Honne wood shutters for doors with stiles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures)	Work done up to the billed quantity and quality is satisfactory
21	Polishing on wood work with ready mixed wax polish of approved brand and manufacture : New work to give an even surface including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, sand papering smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Work done up to the billed quantity and quality is satisfactory
22	Applying priming coat: With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood) including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Work done up to the billed quantity and quality is satisfactory
23	Painting wood work with Deluxe Multi Surface Paint of required shade. Two coat applied @ 0.90 ltr/10 m^2 over an under coat of primer applied @0.75 ltr/10 m^2 of approved brand and manufacture to give an even shade including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, sand papering and knotting , cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Work done up to the billed quantity and quality is satisfactory
24	Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The waterproofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge.	Work done up to the billed quantity and quality is satisfactory
	Qty Above 125%	Work done up to the billed quantity and quality is satisfactory

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25	Providing and fixing Stainless steel staircase raling as per Chief Architect Drawing No. 11520/ HRSC with hand rail 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges, etc., complete as per specifications.	Work done up to the billed quantity and quality is satisfactory
26	Providing and fixing M.S. Gate as per Chief Architect Drawing, using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members asshown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification.	Work done up to the billed quantity and quality is satisfactory
27	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) **Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregates**	Work done up to the billed quantity and quality is satisfactory
	Qty Above 125%	Work done up to the billed quantity and quality is satisfactory

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28	Fabricating, supplying and erecting M.S. TubularTruss of span upto 10m. The bottom and top member is provided with 50x50x6mm double equal angles, welded back to back and in between top and bottom line, in areas of mid section is provided with 50x50x6mm equal single angle for vertical and inclined members and at supporting ends 40x40x5mm single angle is provided. All the members are welded together with 6mm gusset plate as per Drawing. The entire truss is anchored in RCC column by using 4 Nos. of M.S. anchor bolts at each support, with 10mm thick base plate and shoe plate.The work includes cutting, straightening, placing in position of M.S angle and wleding wherever necessary, and applying one coat of red oxide primer coat to all themembers including cost of all materials, labour charges, and hire charges of machineries for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, etc., complete as per specification.	Work done up to the billed quantity and quality is satisfactory
	Qty Above 125%	Work done up to the billed quantity and quality is satisfactory
29	Providing & fixing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete as per design drawings (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required as per the direction of Engineer in charge **0.63 mm thick with zinc coating not less than 275 g/ m²**	Work done up to the billed quantity and quality is satisfactory
	Qty Above 125%	Work done up to the billed quantity and quality is satisfactory
30	Providing granite slabs of selected quality roughly dressed having a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete **Page No. 27 / Item No. 5.31.2 PWD SR 2018-19**	Work done up to the billed quantity and quality is satisfactory
31	KSRB 5-9 : Providing chamfering edges to stone slab 2.5 cms. wide as per specifications. (only chamfered length shall be recorded) KBS 5.1.13 **Page No. 26 / Item No. 5.22, PWD SR 2018-19**	Work done up to the billed quantity and quality is satisfactory
32	KSRB 5-8.2 : Providing two line dressing to granite stone slab / granite stone masonry as per specifications. KBS 5.1.13 **Page No. 26 / Item No. 5.18, PWD SR 2018-19**	Work done up to the billed quantity and quality is satisfactory

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33	Providing and fixing 20mm thick gang saw water cut Lakared granite for cladding in CM 1:3 (1 cement : 3 coarse sand) proportion with a coat of rough plastering using CM 1:4 (1 cement : 4 fine sand), cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, grooves in joints including cost of curing etc., complete including cost and conveyance of all materials, mortar, labour for all items of work, usage charges of machinery etc., complete as per specification **Area of the slab = 0.50 m2**	Work done up to the billed quantity and quality is satisfactory
34	Providing, laying & fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, mortar, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification	Work done up to the billed quantity and quality is satisfactory
35	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 25 stage. ATALANTA< SUGNA< CRI, KIRLOSKAR and other Equivalent Pumps **PWD SR 2018-19 P. XLII Item No. 43 including of all taxes**	Work done up to the billed quantity and quality is satisfactory
36	GI Pipe 50 mm'B' class **Page No. XLVII Sl No. 1, PWD SR 2018-19**	Work done up to the billed quantity and quality is satisfactory
37	Heavy Duty Collar 50 mm dia **Page No. XLVII, SL No. 2, PWD SR 2018-19**	Work done up to the billed quantity and quality is satisfactory
38	Submersible Cable 1x3x6.0 Sq.mm	Work done up to the billed quantity and quality is satisfactory
39	Labour charges for erection as new / repaired submercible pumpset allong with GI pipe (32/50mm) cable (new submercible pumpset if required will be supplied by the department free of cost and released pumpset shoud be handed over to department including transportation (Each lenth =6.00) **Page No. 558, Items No-3 BWSSB SR for 2014-15)**	Work done up to the billed quantity and quality is satisfactory
40	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws.,	Work done up to the billed quantity and quality is satisfactory

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41	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975GROUP-A	Work done up to the billed quantity and quality is satisfactory
42	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. **(6Sqmm to 16 Sqmm)**	Work done up to the billed quantity and quality is satisfactory
43	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete	Work done up to the billed quantity and quality is satisfactory
44	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.	Work done up to the billed quantity and quality is satisfactory
45	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.	Work done up to the billed quantity and quality is satisfactory
46	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia,	Work done up to the billed quantity and quality is satisfactory
47	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.	Work done up to the billed quantity and quality is satisfactory
48	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. **6-32Amps**	Work done up to the billed quantity and quality is satisfactory
49	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete	Work done up to the billed quantity and quality is satisfactory

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E1	Providing, supplying to work site,Single Phase Submersible Pump Sets of 100mm dia (4 inch) suitable for borewell confirming to IS 8034-2000 specifications, with testing of as per instructions of engineer incharge of work and latest amendments Pumps P100A- 5 HP / 3.7 KW 25 Stage	Work done up to the billed quantity and quality is satisfactory
E2	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984-2016 with latest ammendments and conveying to work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials with electrofusion welding, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bedns, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. Note: Upto 110mm dia Coil shall be used. For Grade PE80 PN6.0 P010A- HDPE Grade PE80-PN6.0, 63mm dia	Work done up to the billed quantity and quality is satisfactory
E3	Supply, installing, testing and commissioning COMMON control panel consisting of the following INCOMING:1 No set of Phase indicating lamps with SFU of suitable rating 1 No, Analog Ammeter, 1 No Analog Voltmeter 1ni with Phase selector switch, Isolating switch OUTGOING for Main Electrical Pump: 1 No. MCB 1 No. DOL of S/D Starter suitable for respective HP 1 No. Electrcal Protection Like single Phase preventor, under voltage over Volage, under current over current & dry run protection suitable for the pump described above 1 no Indoor typ e NOTE: 1) DOLDirect Online Starter 2) S-D- Star Delta Starter outdoor Upto 6 HP pumps P280A	Work done up to the billed quantity and quality is satisfactory

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E4	KSRB 7.10 : Providing and fixing in position aluminium windows and ventilators as per approved drawings with sliding shutters using double track window frame section of size 61.85x31.75mm. with 1.2mm thick, bottom section weight 0.695 kg/m, sides and top sections 1.3 mm. thick weight 0.659 kg/m; and shutter comprising top and bottom section of size 40mmx18mm, 1.25mm thick 0.417 kg./m; shutter outer side 40mmx18mm, 1.25mm.thick weight 0.417 kg/m, shutter interlock section 40mmx26.7mm, 1.1mm thick, weight 0.469 kg/m. the shutters mounted on nylon rollers with approved quality of fixtures such as aluminium handles tower bolts etc.; and providing and fixing 5.5mm. thick plain glass for shutters fitted with rubber beading aluminium sections including cutting to required length, joints mitred subdividing the frame tenonned and rivetted in the assembled frame stiffened with end clips at corners angles etc., and fixed to the walls, lintels, floor beams/cills as the case may be with necessary steel screws, raul plugs, or teak wood gatties including cutting masonry or concrete and making good the original surface using cement mortar, aluminium sections pretreated for removal of any Specification No. KBS using aluminium section anodized to 12 - 15 microns.	Work done up to the billed quantity and quality is satisfactory

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